

Midterm practice: Factor difference of squares

First factor any common factors. Then, identify the difference of squares to help factor the expression.

1. Fully factor $72x^2 - 2$

2. Fully factor $18x^2 - 2$

3. Fully factor $125x^2 - 5$

4. Fully factor $8x^2 - 2$

5. Fully factor $16x^2 - 4$

6. Fully factor $20x^2 - 5$

7. Fully factor $x^2 - 16$

8. Fully factor $3x^2 - 75$

9. Fully factor $75x^2 - 3$

10. Fully factor $80x^2 - 5$

11. Fully factor $50x^2 - 2$

12. Fully factor $2x^2 - 72$

13. Fully factor $x^2 - 81$

14. Fully factor $196x^2 - 4$

15. Fully factor $12x^2 - 3$

16. Fully factor $16x^2 - 1$

17. Fully factor $5x^2 - 45$

18. Fully factor $108x^2 - 3$

19. Fully factor $162x^2 - 2$

20. Fully factor $x^2 - 4$

$$4. \quad 2(2x + 1)(2x - 1)$$

$$12. \quad 2(x + 6)(x - 6)$$

$$2. \quad 2(3x + 1)(3x - 1)$$

$$19. \quad 2(9x + 1)(9x - 1)$$

$$5. \quad 4(2x + 1)(2x - 1)$$

$$6. \quad 5(2x + 1)(2x - 1)$$

$$17. \quad 5(x + 3)(x - 3)$$

$$7. \quad (x + 4)(x - 4)$$

$$11. \quad 2(5x + 1)(5x - 1)$$

$$18. \quad 3(6x + 1)(6x - 1)$$

$$16. \quad (4x + 1)(4x - 1)$$

$$10. \quad 5(4x + 1)(4x - 1)$$

$$1. \quad 2(6x + 1)(6x - 1)$$

$$14. \quad 4(7x + 1)(7x - 1)$$

$$15. \quad 3(2x + 1)(2x - 1)$$

$$13. \quad (x + 9)(x - 9)$$

$$9. \quad 3(5x + 1)(5x - 1)$$

$$20. \quad (x + 2)(x - 2)$$

$$3. \quad 5(5x + 1)(5x - 1)$$

$$8. \quad 3(x + 5)(x - 5)$$